

Impact of special project on lac cultivation & processing in the Mahasamund divisional forest area of Chhattisgarh under Swarnjayanti Gram Swarozgar Yojana (SGSY)

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ABSTRACT: Chhattisgarh State Minor Forest Produce Ltd. Raipur (CGMFP), Govt. of Chhattisgarh has implemented a special project on Lac Cultivation & Processing in Chhattisgarh states. This project was aimed to train the tribal people for scientific lac cultivation practices, to provide required input materials like broodlac, pesticides, tools and implements and providing the post harvest management facilities. Present study was conducted in the Mahasamund divisional forest area of Chhattisgarh state to see the impact of the project. For the purpose of study, 5% beneficiaries i.e. 25 from both of the block were randomly identified and the data were collected on various aspects of lac cultivation and about this scheme through interview schedule. The data related to method of lac cultivation, production and income generated were recorded. It was intimated by the beneficiaries that Market value of the produce was transferred in the bank accounts of SHG members and it was evidences in the form of approved official records i.e. bank passbook. It was observed that non-credit inputs like Secateurs, Dauli / Pruning knives were received by the beneficiaries and utilized at the time of pruning and to prune subsequently. Planning and implementation of the scheme were satisfactory except Small Scale Lac Processing Unit establishment; extra effort is required in this region for making operational of Processing Unit at primary level processing and value addition. Non-credit inputs seem to be a major motivation factor for the members of SHGs.

Key Words: Impact, SGSY, Mahasamund divisional forest area, Lac cultivation and Processing

INTRODUCTION

Swarnajayanti Gram Swarozgar Yojana (SGSY) was implemented as an integrated programme for self-employment of the rural poor with effect from April 1, 1999. The SGSY aims at providing self-employment to villagers through the establishment of self-help groups. Under such scheme, Chhattisgarh State Minor Forest Produce Ltd. Raipur (CGMFP), Govt. of Chhattisgarh has implemented a special project on Lac Cultivation & Processing in Chhattisgarh states during 2010-11 to 2013-14. The proposed two pronged strategy of universalization of coverage of SHGs with doubling the proportion of SHGs assisted by bank credit and providing skills at least to one youth of a Below Poverty Line (BPL) family necessitates restructuring of SGSY and to strengthen the capabilities of the poor for bringing

them into mainstream of development as active partners. Consequently, the initiatives had taken by the government under this scheme. The scheduled tribes of the states were targeted under the lac cultivation and processing project. This study was conducted at Mahasamund District of Chhattisgarh state. Mahasamund district is spread out in an area of 4790 Sq. Kms in the Central-East part of Chhattisgarh State. As per Census 2011[1] district population is 10.32 lakh persons including 5.12 lakh male and 5.20 lakh females. Literacy is 71.02% (total), 82.05% (male) and 60.25% (female) in the district (Census, 2011). Across the five Tehsils in the district namely Bagbahara, Basna, Mahasamund, Pithora and Saraipali about 1.9 lakh families marked as Below Poverty Line (BPL). Out of total geographical area 352700 ha about 75000 ha area is occupied under forest cover (<http://www.cgmfpfed.org/>) [2]. A total of

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270853 ha area is under arable land in the district and rice is the major crop (<http://mahasamund.gov.in/>) [5].

This project was aimed to train the tribal people for scientific lac cultivation practices and providing the post harvest management facilities. For this, identified SHG members got benefitted under capacity building programme at ICAR- Indian Institute of Natural Resins and Gums, Ranchi (Jharkhand) as well as the required non-credit input support like broodlac, pesticides, tools and implements were provided among the group.

Lac is a natural resinous substance of profound economic importance in India. It is the only resin from animal origin lending itself to diverse applications e.g. as a protective and decorative coating in the form of thin films, adhesives and plastics. It makes a small but significant contribution to the foreign exchange earning of the country, but the most important role that lac plays in the economy of the country is that roughly 3-4 million tribal people, who constitute the socioeconomically weakest link of Indian population earn a subsidiary income from its cultivation. India is the major producer of lac, accounting for more than 50% of the total world production. It virtually held a monopoly in the lac trade during the period of the world war-I, producing nearly 90% of the world's total output. At present an average of about 16 -17 thousand tons of stick lac (raw lac) is produced in the country annually (Yogi *et al.*, 2015) [6]. Usually host trees standing on 'Rayyati' lands are used for lac cultivation and in some areas trees on Government land are taken on lease or rental basis. The country's production of lac was 21,008 tonnes in 2013-14 (IINRG Annual Report 2014-15) [3]. Lac is considered to be

an important cash crop by the poor cultivators (usually the tribal inhabitants) in almost all the major lac-growing states of the country. Most of the lac produced in our country is from homestead land and rural areas, a large number of poor cultivators producing but in very less quantity. For them, there is hardly any investment, except in years of adverse conditions. They either own a few lac hosts or take them out on lease or rental basis, and generally only part-time family labour is employed. When the lac matures, it fetches them ready cash.

To find out the success of any programme a periodic appraisal and evaluation of what is being done is essential, so that suitable changes can be made to make the programme more effective. This creates a need to do some serious evaluation of the programme. Keeping this idea in view, this study was conducted to know the Socio profile and analysis of the economic gains across different SHGs through lac cultivation, processing and disposal of lac and to know the important constraints faced by stakeholders for their suggestive measures.

METHODOLOGY

The scheme was implemented in Mahasamund district of Chhattisgarh. The district comprised of seven Blocks. Out of these blocks, two blocks namely Mahasamund and Pithora were identified to implement the scheme at grassroots level. A total of 11 villages were identified where this project was implemented, out of that 4 villages were having Primary Non-Wood Forest Produce Cooperative Societies (PNFPCS). The details of the village wise SHGs and lac host trees owned/allotted are given in Table 1.

Table 1
Village-wise SHGs and available lac host trees among the beneficiaries

S. No.	Name of Block	Name of PNFPCS	Name of village	No. of SHGs	No. of members	No. of lac host trees
1.	Mahasamund and Pithora	Mudipar	Lamidih,	1	20	1000
2.			Dadargaon	3	60	3000
3.			Sonasilli	3	60	3000
4.			Parepali	1	20	1000
5.			Ghanora	5	90	4500
6.			Jampali	2	40	2000
7.		Total				
		Singhrupali	Sindhupali	2	40	2000
		Total				
8.		Charbhanta	Anusula	4	72	3600
9.			Charbhanta	2	26	1300
		Total				
10.		Baludidih	Gokuludih	3	55	2750
11.			Lohrakot	1	17	850
	Grand Total			27	500	25000

For the purpose of study, 5% beneficiaries i.e. 25 from both of the block were randomly identified and accordingly the data were collected through personal interview method with the help of interview schedule. The data were directly recorded on the schedule and further it was classified, tabulated and analyzed in accordance with the objective framed out under study.

RESULTS AND DISCUSSION

The randomly selected beneficiaries were interviewed regarding the various aspects of lac cultivation and

about this scheme. The data related to method of lac cultivation, production and income generated were recorded. It was intimated by the beneficiaries that Market value of the produce was transferred in the bank accounts of SHG members and it was evidences in the form of approved official records i.e. bank passbook. The details of the approved project for the district was mentioned below in Table 2.

In first phase, identification of potential area for lac cultivation, complete enumeration across identified villages, identification of SHGs, allotment of lac host trees, distribution of Kit to beneficiaries,

Table 2
Details of the Special Project on lac cultivation & processing under SGSY for Mahasamund

S. No.	Particulars	Details
1.	Name of the project	Lac Cultivation and Processing Project Sponsored by SGSY
2.	Financial Year	2009-2010 to 2013-14
3.	Implementing Agency/ Coordinating Agency	District Union Mahasamund (Chhattisgarh State Minor Forest Produce Ltd. Raipur)
4.	Date of Sanction	02-12-2009
5.	Approved Project period	04 years
6.	Total Project cost	Rs 39.15 lakh
7.	Blocks covered	Mahasamund and Pithora
8.	Name of Primary NWFP Cooperative Societies	Mudipar, Singhrupali, Charbhanta and Baldidih
9.	Name of revenue villages covered (all villages consist of forest societies)	Lamidih, Dadargaon, Sonasilli, Parepali, Ghanora, Jampali, Sindhupali, Anusula, Charbhanta, Gokuludih, Lohrakot
10.	Total number of beneficiaries	500
11.	Total number of SHGs	27
12.	Lac host trees identified	25000

capacity building of beneficiaries and pruning of lac host trees were completed in the technical guidance of the experts from ICAR-Indian Institute of Natural Resins and Gums, Ranchi. The study report can be studied under the following headings-

Distribution of non-credit inputs for beneficiaries and allotment of lac host trees under the scheme

It was observed that the following non-credit inputs were provided to the beneficiaries of Mahasamund divisional forest area under this scheme. Secateurs, *Dauli*/Pruning knives were received by the beneficiaries and utilized at the time of pruning and to prune subsequently. All the instruments were distributed among the beneficiaries in the presence of local representatives. A total of 5 lac host trees of *palas* (*Butea monosperma*) were identified for each beneficiary. At the time of field visit, beneficiaries were asked about the various inputs provided for performing lac cultivation activities. They informed that kits were distributed in the presence of local representatives. The quantity of supplied non-credit inputs are hereby mentioned below in Table 3.

Table 3
Distribution of non-credit inputs for beneficiaries under the scheme

Particulars	Quantity
Secateurs (Nos.)	125
<i>Dauli</i> (Nos.)	125
Scraping Knife (Nos.)	125
Sprayer (Nos.)	25
GI Sheet Bucket (Nos.)	75
Naylon net (16 mesh) (Nos.)	15000
Plastic <i>sutli</i> (in kg)	24
Pesticides (Pack)	32
Broodlac (kg)	3806

Capacity building programme on scientific lac cultivation

All the beneficiaries of Mahasamund divisional forest area attended the one week training programme and five master trainers were also got trained for technical support particularly at the time of inoculation and pest management practices at farmer's field during 2010. A total of 500 beneficiaries attended the one week training programme on "Scientific lac

cultivation" at ICAR-IINRG, Ranchi in three phases (Kumar *et al*, 2015) [4].

Income and employment generation through SHGs

Most efficient utilization of identified lac host trees was achieved due to adoption of coupe system of lac cultivation for sustained broodlac supply. At the time of survey and field visits, the lac host trees were found with good encrustation of *rangeeni* crop. Consequently, resources were mobilized and an amount of Rs 83.44 lakh was generated with gainful employment opportunities as well. As an outcome of the project, out of total 27 SHGs about 26% SHGs enabled to generate an income more than Rs 1.0 lakh, whereas about 74% SHGs enabled to generate an income less than Rs 1.0 lakh. Overall, due to this intervention the available local resources in the proximity of the tribals started to harvest around 1 kg of scraped lac per *palas* trees (Table 6).

Table 4
Value of lac produced/total income generated at SHG level (value in Rs lakh)

Particulars	Value
2010-11	0.00
2011-12	0.00
2012-13	67.62
2013-14	15.82
2014-15	0.00
Total	83.44

Table 5
Distribution of total SHG wise annual income from the lac cultivation

Particulars	No. of SHGs
Up to Rs 1.0 lakh	20
Rs 1.0-5.0 lakh	7
Rs 5.0-10.0lakh	-
> Rs 10.0 lakh	-
Total	27

Table 6
Lac production and income generation (in Rs)

Particulars	Unit
Lac production (in Qt.)	202.4
No. of host trees inoculated	25000
Yield per tree (kg)	0.81
Lac production /household (kg)	40
Income in 2010 (Pre)/hh	10000
Income in 2015 (Post)/hh	15000

Awareness among stakeholders about the scientific lac cultivation and its scope for income and employment generation

The stakeholders have got the technical know, how about the scientific lac cultivation can be done.

Indirectly, many neighboring households who are having lac host trees were also sensitized and started to utilize their host plant.

Establishment of Small scale lac processing unit (SSLPU)

A Small scale lac processing unit (SSLPU) was established at Mahasamund and it was observed that it is not properly utilized for primary level processing by the stakeholders.

SUITABLE EXTENSION STRATEGIES

The investigators had suggested some suitable extension strategies based on observation, discussion with farmers, extension personnel and other stakeholders for effective implementation of the project. The extension strategies are-

- Ease in accessibility of credit and non-credit inputs to be ensured: Tribes in forest areas are very sensitive in adoption of new technologies, new interventions even though these are available. But, the adoption level of any intervention whether it may be policy or technological, depends on the accessibility of inputs (credit and non-credit). Hence, during the period all inputs were accessed with the support of the officials of various institutions including CGMFP, Raipur (CG), ICAR-IINRG, Ranchi (Jharkhand) Forest Department, financial institutions, service providers and other line departments. It has good impact by showing the sites of availability and ways for accessibility to the tribal mass inhabiting in remote areas of the state. Hence, it is inevitable that in future technical support should be given for updating the information about the sector.
- Mobility characteristics: It reveal that more SHG members engaged in visits to banks for SHG work, interact with banking officials and handle the banking transactions. SHG members have participated in the SHG activities outside the village for procurement of raw materials and marketing of products.
- Development of infrastructure for facilitating the value addition at local level.
- The officials of forest department, line departments are to be enthusiastic to felicitating the successful and progressive farmers in the presence of local representatives of the villages.

- Stakeholders should be linked directly with the service providers for long term impact. It will strengthen the forward and backward linkages for more productivity and value addition of the final produce.
- Pest management related knowledge should be updated time to time as it is necessary to follow the recommended schedule of pest management for lac cultivation by ICAR-IINRG, Ranchi. Master trainers should be trained regularly for refreshing the knowledge and updating the new information.
- Excellent SHGs may be popularized for wider adoption of the scientific lac cultivation. SHGs may be specialized for the crops like *baisakhi*, *jethwi*, *katki* and *aghani*. Five SHGs may agree for coupe system and one group will harvest crop and it will be able to supply the *broodlac* for another groups. In this manner problem of broodlac supply/ shortage of broodlac/ problem in transportation can be minimized.
- During the monthly meetings of SHGs officials may also participate and help them, to disburse the income/profits into proper direction so that more resources may be generated for new generations.
- SHGs/ Federations may plan to procure the produce at Minimum support price (MSP) announced by Ministry of Tribal Affairs, Government of India. Federation may charge some fee to procure sticklac at the established Small scale lac processing unit (SSLPU) and then the seedlac can be sold on higher price. Progressive SHGs may be supported with non-credit inputs and newer SHGs may be identified for wider coverage.
- At the time of harvesting, support services like implements for harvesting, transport facility, market facility, storage facility and money deposit, *etc.* may be ensured for the stakeholders.

CONCLUSIONS & RECOMMENDATIONS

Planning and implementation of the scheme are satisfactory except processing unit establishment at

Mahasamund regions; extra effort is required in this region for making operational of SSLPU at primary level processing and value addition. Non-credit inputs seem to be a major motivation factor for the members of SHGs. Some members/SHG have not generated economic surplus from their non-credit led assets; skill based training given by master trainers seems to be weak. Grassroots functionaries who are responsible for forming and nurturing the groups need to be trained for this purpose. Since SHG is in the core of SGSY model, philosophy of SHG must be respected. SHG is a slow process. Lot of time needs to be spent on formation, nurturing and mentoring of the SHGs. Since involvement of women in decision making has the key role, it is advisable that more women are assigned the job of forming and nurturing the groups. The functionaries must be trained first. There must be enough provision for training in the budget.

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